

NOTES ON MESEMBRYANTHEMUM AND ALLIED GENERA

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Aptenia lancifolia.—Planta 1 visa, herbacea glabra, minute nitente papillosa, laxe ramosa; rami primarii decumbentes teretes, saepe subflexuosi, ad 39 cm. longi, nodis interdum leviter constrictis, internodiis 1.5—4.5 cm. longis, 3—5 mm. diam.; folia opposita, ascendentia vel patentia, lanceolata vel anguste lanceolata, basim versus subpetiolata, obtusa vel subacuta, supra leviter canaliculata, obtuse carinata, viridia, fere ad 3.2 cm. longa, 6 mm. lata, culta per 3 menses ad 5.5 cm. longa, ad 1.2 cm. lata; flores solitarii vel rarius 3-nati tumque ramum terminantes, diurni, sessiles vel pedunculis 3—5 mm., fructiferis ad 7 mm., longis; receptaculum subclavatum, 4—5 mm. longum, ad 5 mm. diam.; sepala 2 exteriora superne leviter angustata, obtusa convexa, 5—6 mm., vel in flore majore ad 10 mm., longa, basi ad 4 mm. lata, 2 interiora e infra medium subulata, subula patente, 4—5 mm., vel ad 7 mm., longa, basi 1.5—2 mm. lata, omnia in fructu immaturo accrescentia; petala basi brevissime, vel vix ad 1 mm., coalita, 6-seriata, seriebus 3 exterioribus obtusa vel acuta, rosea, ad 9 mm. longa, ad 1 mm. lata, seriebus 3 interioribus pallidioribus, acuta vel acuminata, intima serie stamina circumdata eaque excedens, sed nulla staminodia antheras abortivas ferentia visa; filamenta alba, ad 3 mm. longa, antheris pollineque albis; nectarium non observatum; ovarii lobi levissime compressi, ca. 0.5 mm. elevati; stigmata gracilia, superne angustata, pallida, ad 2 mm. longa; capsula infra clavata, 4-angulata, inter angulos costata, 6 mm. longa, supra per 3 mm. elevata, suturis compressis, expansa ad 1.2 cm. diam., valvis 4 mm. longis, basi 4 mm. latis; semina eis **A. cordifoliae** simillima.

Transvaal: "on the farm Rouwput, near Bandolier Kop, Pietersburg district", May 1959, *A. W. Riley* (N.B.G. 372/59). Fl. Jun.—Jul. 1959.

Eberlanzia triticiformis (L. Bol.) L. Bol. var. **subglobosa**.—Folia subglobosa, 3—4 mm. longa, vel supra visa oblonga obtusa, ad 6 mm. longa, 3 mm. lata diametroque, omnia lat. visa apice rotundata; flores typo exacte similes, ad 1.9 cm. diam.; pedunculi saepissime 3, lateralibus 2—4 mm. longis, intermedio sterili spinescente, 6—8 mm. longo; capsula expansa, manu complanata, ad 1 cm. diam., valvis in parte superiore alam medianam membranaceam ferentibus, alis marginalibus nullis, carinis e basi late divergentibus, medium valvae attingentibus.

Cape Province: In dit. Oudtshoorn, "a few hundred yards S. of Warmbad in the Calitzdorp District", Jul. 1955, *A. M. du Plessis* (Bolus Herb. 26803); Stildrift, Jul. 1955, *R. du Plessis* 59.

The type of this species was described as *Mes. triticiforme* in 1925 from cultivated plants whose origin was unknown. These plants had no spines, but subsequent collections have been made showing the characteristic spines of *Eberlanzia* and the species was accordingly combined with this genus. After flowering the lateral peduncles are also spinescent.

***Delosperma rileyi*.**—Planta 1 visa, per 2 menses culta, suffruticosa glabra gracilis, laxe copioseque ramosa, 20 cm. alta; rami erecti vel patentes vel subdecumbentes, pallide grisei, internodiis 1.5–3 cm. longis, vix ad 2 mm. diam., in ramulis multo brevioribus; folia ascendentia vel patentia, vel interdum demum falcate recurva, supra linearia, apicem versus leviter angustata, convexa, lat. visa abrupte acuta vel obtusa, lateribus convexis, novella carinata, carina in adultis nulla vel obscura, viridia polita, 1–2 cm., vel rarius ad 3.5 cm., longa, 2–4 mm. lata diametroque; flores solitarii diurni; pedunculi superne leviter ampliati, 4–10 mm. longi; receptaculum 1.5–2 mm. longum, ad 4 mm. diam.; sepala 5, valde inaequilonga, acuta vel acuminata, 3–10 mm., vel 3–7 mm., longa, basi 1.5–2 mm. lata, extima saepe patentia vel recurva; petala 3-seriata, inferne leviter angustata, obtusa, cuprea, interdum basim versus rosea, ad 8 mm. longa, vel senecta ad 10 mm., longa, 1–1.25 mm. lata; staminodia stamina conferta erecta aequantia vel exteriora ea bene excedentia; filamenta 3-seriata, alba, ad 4 mm. longa, intima prope medium papillata, antheris pollineque albidis; glandulae nectarii semilunatae; ovarium circa marginem concavum, lobis abrupte erectis, obtuse compressis, ad 0.75 mm. elevatis; stigmata 5, angustissime subulata, viridia, 2–2.5 mm. longa cum cauda 0.5 mm.

Transvaal: Sekukuniland, May, 1959, *A. W. Riley* (N.B.G. 368/59). Fl. Jun.—Jul. 1959.

***Delosperma zoutpansbergense*.**—Planta 1 visa, per 3 menses culta, humilis glabra gracilis, diffuse ramosa, partes herbaceae virides, nitente papillosae; rami primarii decumbentes, ad 25 cm. longi, internodiis 1–4.5 cm. longis, saepius ad 1.5 mm. diam.; folia ascendentia vel erecta apicemque versus recurva, supra visa linearia, prope apicem leviter angustata, acuta vel subobtusa, dorso convexa, lat. visa obtusa, fere 1–3 cm., culta ad 5 cm., longa, medio 2–4 mm. lata diametroque, vagina in novellis 1.5 mm. longa; flores diurni, 2.7–3 cm. diam.; pedunculi saepe ad 1.5 cm. longi; receptaculum obconicum, 2–3 mm. longum, ad 4 mm. diam.; sepala 5, valde inaequilonga, acuminata, 2 exteriora 8–9

mm., vel in flore altero ad 10 mm., 3 interiora 4—5 mm. longa, basi 1.5—2 mm. lata; petala 2—3-seriata, parum inaequilonga, sat laxa, inferne leviter angustata, saepissime acuta, roseopurpurea, 1—1.3 cm. longa, 0.75—1.25 mm. lata; staminodia stamina conice conferta bene excedentia, exteriora late recurva, cum filamentis inferne rosea, superne alba; filamenta ad 3 mm. longa, interiora supra medium papillata, antheris pollineque albis; glandulae subdistantes crenulatae; ovarium concavum, medium versus sat abrupte elevatum ad 0.75 mm., lobis obtuse compressis; stigmata 5, anguste subulata, ad 3 mm. longa cum cauda 0.75 mm.; capsula non visa.

Transvaal: Zoutpansberg, "summit of Cloud End, above Mountain Inn", Dec., 1958, *A. O. D. Mogg* (N.B.G. 2/59). Fl. Apr.—May, 1959.

Delosperma lydenburgense L. Bol. var. ***acutipetalum***.—Planta 1 visa per 2 menses culta, erecta glabra, diffuse ramosa, 20 cm. alta, partes herbaceae papillatae, papillis rotundatis; rami ascendentes 12—14 cm. longi, internodiis 1—5 cm. longis, ad 4 mm. diam.; folia ascendentia, supra visa e supra medium gradatim angustata, acuta vel obtusa, lat. visa prope apicem angustata, acuta vel obtusa, viridia, 3—7.5 cm. longa, medio 7—8 mm. lata; flores solitarii vel apice ramorum ternati vel irregulariter 2-ternati; pedunculi 1.4—2 cm. longi, in receptaculum obconicum, 4 mm. longum, ad 7 mm. diam., abeuntes; sepala 5, extima 2 acuminata vel obtusa, intima 2 late membranaceo marginata, e medio subulata, subula patente, 8—9 mm. longa, basi 3—4 mm. lata; petala 5-seriata, interiora pauca, inferne leviter angustata, saepius acuta, ad 3.3 cm. longa, 0.75—2 mm., saepius 1.5 mm., lata; staminodia pauca, stamina excedentia, superne recurva vel revoluta; filamenta erecta, pallide rosea, exteriora inferne ciliate papillata, interiora supra medium longe papillata, antheris pollineque albis; glandulae distantes, obscure crenulatae; stigmata 5—6, subulata, conspicue papillata, praecipue basim versus, 5—5 mm. longa cum cauda 0.75 mm.; capsula infra 4—5 mm. longa, obconica 5—6-angulata, inter angulos obscure costata, supra per 2 mm. elevata, suturis valde compressis, expansa 1—1.4 cm. diam., carinis prope apicem profunde laceratis; semina brunnea, minute tuberculata.

Transvaal: "On the farm Rouwput, near Bandolier Kop, Pietersburg district", May, 1959, *A. W. Riley* (N.B.G. 373/59). Fl. Jul.—Aug., 1959

Mr. Riley's discovery of this second species of ***Aptenia*** is noteworthy. It was found on his farm with 4 species of ***Delosperma***—***D. tradescantioides***, ***D. lydenburgense*** var. ***acutipetalum*** and 2 species not yet identified. These might well have been expected to occur in that area. For ***Delosperma*** seems to be the only genus of *Mesembrieae* to reach the northern

limits of the Transvaal, and beyond them, being represented in Rhodesia by **D. mahoni** and **D. steytlerae** and farther north by **D. nakurense** and **D. abyscinicum**. But **Aptenia lanceolata** came as a great surprise 178 years after the first species, *M. cordifolium* L.f., was described in 1781, having been introduced to England by Masson in 1774 from the eastern coastal districts of the Cape Province. In 1925 it was distinguished from its allies by the absence of wings on the valves of the expanded fruit and became **Aptenia cordifolia** (L.f.) N.E.Br.—the name being derived from the Greek *apten*, wingless. This species has also been recorded from the Transvaal and probably does occur there spontaneously, although in some instances it may have been introduced and become naturalised, as has happened in other warmer parts of the world. Dr. Schwantes, who has made a special study of the fruit of the *Mesembrieae*, regards that of **Aptenia** as being quite the simplest form, in that the seeds are more readily shed than they are from the more complicated structures found in the other genera. These he describes as being among—"the most interesting and mysterious structures in the plant world and, in many ways the most beautiful".

(To be continued.)